

AMENDMENTS TO THE CLAIMS

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (currently amended) A method for replacing solvents evaporating from a microvolume of solvent placed in an open microarea of a microfluidic device comprising the step of replacing solvent continuously via a microchannel that transports liquid to the microarea from a liquid reservoir, wherein the microvolume of solvent comprises reactants for performing a reaction in the solvent on the microarea.
7. (previously presented) The method of claim 6, wherein the microarea, microchannel and reservoir are parts of a microfluidic device.
8. (currently amended) A method for replacing solvents for preventing samples from becoming desiccated comprising the following steps:

providing a microarea for carrying receiving a sample connected to a solvent reservoir by a microchannel;
~~connecting the microarea to a reservoir of solvent by a microchannel;~~
applying providing the sample to the microarea which sample contains one or more reactants and a solvent;
allowing the solvent to evaporate from said microarea; and
continuously replacing said evaporated solvent with solvent from said reservoir.
9. (previously presented) The method of claim 8 further comprising the step of anchoring the sample to the microarea.

10. (previously presented) The method of claim 7, wherein the reservoir is positioned so as to create an overpressure in the solvent which is in equilibrium with the interfacial pressure difference across the curved surface of the droplet or said reservoir is connected to pump means that either facilitate replacement of solvent by pumping solvent or pressurising the reservoir.
11. (previously presented) The method of claim 7, wherein the microfluidic device comprises a plurality of microchannels and open chambers forming an array in the circular or rectangular format.
12. (currently amended) The method of claim 7, wherein ~~the microarea carrys a microvolume containing one or more of the reactants that are soluble in the solvent or bound to a solid support in contact with the microvolume.~~
13. (canceled)